


Engineer: Jack Curtis	Date: 4/22/04	 <b>JPS Communications</b> 5800 Departure Drive, Raleigh, NC 27616			
Drawn: Jack Curtis	Date: 4/22/04				
Approved: CTS	Date: 6/21/04	Title: ACU RADIO APPLICATION NOTES			
Issued/ Revised	Date: 8/24/04	Size: A	Dwg. #: <b>5961-271236-APP</b>	Rev: <b>C-3</b>	Sheet: 1      Of    1

**APPLIES TO:**                      Vertex VX-4000 Mobile Radio  
Vertex VX-6000 Mobile Radio

**RADIO MODIFICATIONS:**    None required.

**RADIO PROGRAMMING:**

1.        Mobile radios should normally be programmed for low transmit power.

**RADIO CONTROLS:**

1.        Adjust the Volume Control until the yellow “SIGNAL” indicator on the associated DSP Module flashes with receive audio.

**CABLING:**

Standard ACU-1000 and ACU-T Interface cables are made up of a 2 foot TRP Radio Tray Interface cable and the appropriate 13-foot Extension cable.

ACU-1000 Interface Cable	JPS P/N 5961-291236	(5961-271236 + 5961-261002-00)
ACU-T Interface Cable	JPS P/N 5961-281236	(5961-271236 + 5961-281013-00)
TRP-1000 Shelf Interface Cable	JPS P/N 5961-271236	
Radio RF Connector Type		

**DSP-1 JUMPERS:**

JP1	Low Impedance *
JP2	Balanced *

**DSP PROGRAMMING:**

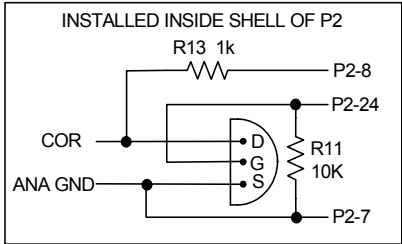
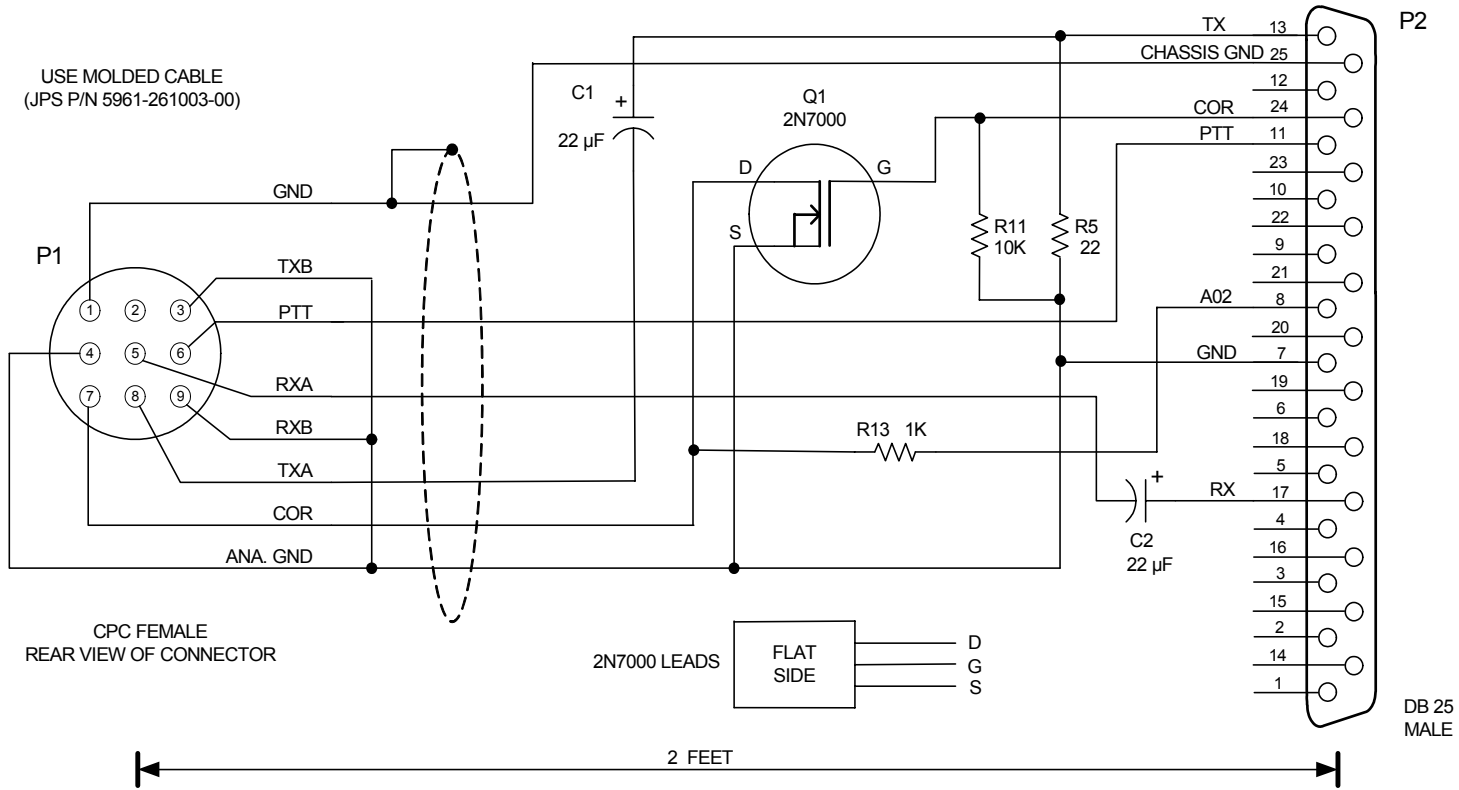
RX Level	4*	-4dBm*
TX Level	6*	0dBm*
Squelch Type	COR	
COR Polarity	Active high	
High Frequency Equalizer	4*	Flat*
RX Audio Delay	2*	100 ms*
TX Audio Delay (Radio Type)	0*	No Delay*
Noise Reduction Value	0*	Off*
VOX/VMR Threshold	1*	Med1*
VOX/VMR Hang Time	3*	775 ms*
COR Inhibit After PTT	1*	100 ms*
All Others	As needed	

(\* Indicates Default Value)

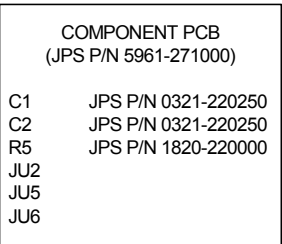
**NOTES:**

PURCHASED PART

Rev	ECO	Date
C3		8-23-04



NOTES: FOR Q1 USE JPS P/N 2047-070000.  
FOR R13 USE JPS P/N 1820-102000.  
FOR R11 USE JPS P/N 1820-103000.



USED WITH:  
VERTEX VX-4000 MOBILE  
VERTEX VX-6000 MOBILE

NOTES: SHIELD DRAIN CONNECTED TO PIN 1 OF P1 ONLY.  
INSTALL Q1, R11 AND R13 INSIDE THE SHELL OF P2.

Designed By:	CTS	<b>Raytheon JPS Communications</b> Raleigh, NC USA		
Drawn By:	RBP	Title CABLE, CPC TO VERTEX VX-4000 MOBILE		
Checked By:	JAC	Size A	Document Number <b>5961-271236</b>	Rev C3
		Issued Date JUNE 21, 2004	Sheet 1 of 1	

# PURCHASED PART

Rev	ECO	Date
A		



- NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.  
2) CONNECT SHIELD DRAIN TO SHELL OF P1 ONLY.  
3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.  
4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

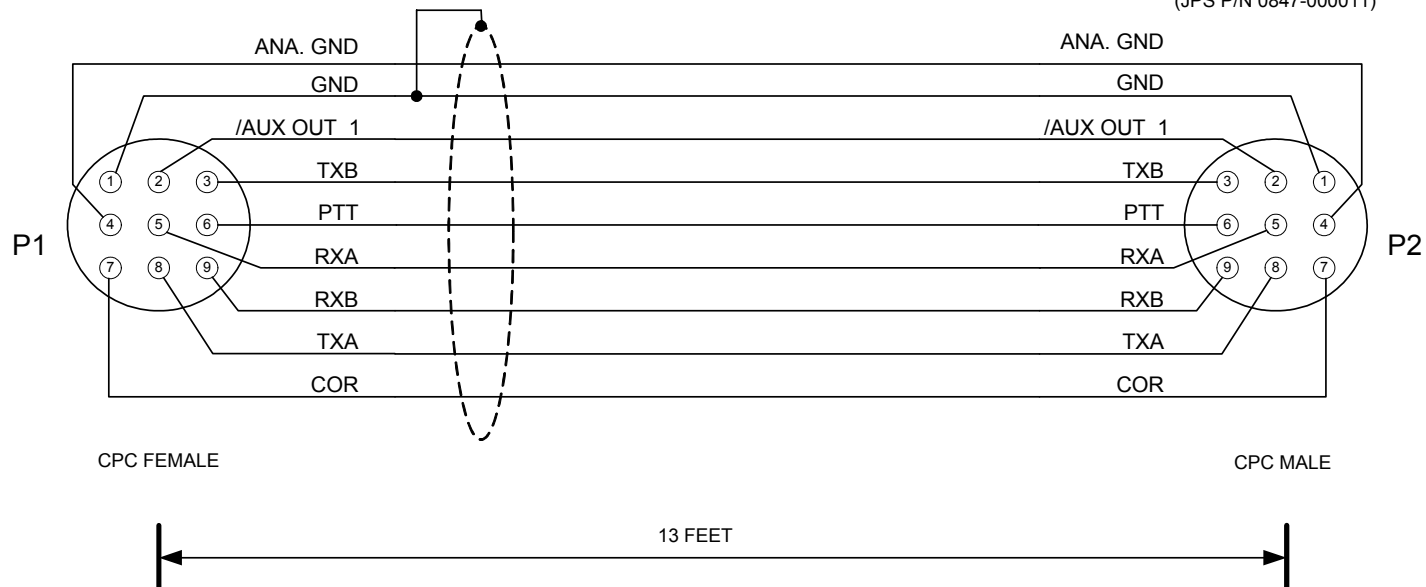
Designed By: JAC	<b>Raytheon JPS Communications</b>		
Drawn By: JAC	Title CABLE, ACU-1000 RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number <b>5961-261002-00</b>	Rev A
Issued Date JANUARY 5, 2004		Sheet <u>1</u> of <u>1</u>	

Rev	ECO	Date
A		

## PURCHASED PART

CONNECTOR AMP P/N 206708-1  
(JPS P/N 0362-005003)  
FEMALE PIN AMP P/N 1-66105-8  
(JPS P/N 0362-005002)

CONNECTOR AMP P/N 206705-4  
(JPS P/N 0362-009001)  
MALE PIN AMP P/N 1-66103-7  
(JPS P/N 0847-000011)



- NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.  
2) CONNECT SHIELD DRAIN TO PIN 1 OF P1 ONLY.  
3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.  
4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

Designed By: JAC	<b>Raytheon JPS Communications</b> Raleigh, NC USA		
Drawn By: JAC	Title CABLE, ACU-T RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number <b>5961-281013-00</b>	Rev A
Issued Date JANUARY 5, 2004		Sheet <u>1</u> of <u>1</u>	